DEPARTMENT OF TRANSPORTATION
DIVISION OF ENGINEERING SERVICES
Office of Structural Materials
Quality Assurance and Source Inspection

Bay Area Branch
690 Walnut Ave.St. 150
Vallejo, CA 94592-1133
(707) 649-5453
(707) 649-5493

Contract #: 04-0120F4
Cty: SF/ALA Rte: 80 PM: 13.2/13.9
File #: 69.28

WELDING INSPECTION REPORT

Resident Engineer: Siegenthaler, Peter
Address: 333 Burma Road
City: Oakland, CA 94607

Report No: WIR-022325
Date Inspected: 24-Mar-2011

Project Name: SAS Superstructure
Prime Contractor: American Bridge/Fluor Enterprises, a JV
Contractor: Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island

OSM Arrival Time: 700
OSM Departure Time: 1900
Location: Shanghai, China

CWI Name: An Qing Xiang

Inspected CWI report:	☐ Yes	☑ No	☐ N/A	**CWI Present:**	☑ Yes	☐ No	
Electrode to specification:	☑ Yes	☐ No	☐ N/A	**Rod Oven in Use:**	☑ Yes	☐ No	☐ N/A
Qualified Welders:	☑ Yes	☐ No	☐ N/A	**Weld Procedures Followed:**	☑ Yes	☐ No	☐ N/A
Approved Drawings:	☑ Yes	☐ No	☐ N/A	**Verified Joint Fit-up:**	☑ Yes	☐ No	☐ N/A
				Approved WPS:	☑ Yes	☐ No	☐ N/A
				Delayed / Cancelled:	☐ Yes	☑ No	☐ N/A

Bridge No: 34-0006
Component: OBG Components

Summary of Items Observed:
On this day CALTRANS OSM Quality Assurance (QA) Inspector, Anand Upadhye was present during the times noted above for observations relative to the work being performed.

NDT
BAY 14

The following Non Destructive Testing (NDT) inspection carried out as per the ZPMC submitted notification number 08607.
Ultrasonic Testing (UT).

This QA inspector performed UT of approximately 10 % of the area previously tested and accepted by ZPMC Quality control personnel. This QA inspector generated UT report for this date. The members are identified as OBG Components. The weld designations reviewed are as follows:

SEG3009H-002, 003, 004, 005.

SEG3009F-002, 003, 004.

SEG3011K-002, 003, 005.

SEG3011F-002, 003, 004, 005.

The following Non Destructive Testing (NDT) inspection carried out as per the ZPMC submitted notification number 08616.
Magnetic Particle Testing (MT).

This QA inspector performed MT of approximately 15 % of the area previously tested and accepted by ZPMC Quality control personnel. This QA inspector generated MT report for this date. The members are identified as OBG Components. The weld designations reviewed are as follows:

SEG3009N-026.

SEG3009J-085,090,095,100,105,110,115,120,125,130,135,140,145,148,271,276,281,291,296,301,155.

WELDING
This QA Inspector observed the following work in progress:

BAY 14
This QA Inspector observed ZPMC qualified welding personnel identified as 045143 perform welding by Flux Cored Arc Welding (FCAW), on Deck panel diaphragm to deck panel diaphragm weld of OBG Segment 13CW. Weld joint is identified as SEG3015E-012. ZPMC Quality Control (QC) Inspector identified as Zhang Lin was present to monitor the welding process. The welding variables recorded by ZPMC QC appeared to be in general compliance with WPS-B-T-2233-ESAB. This QA Inspector noted welding variables were 235~245 amperes and 24.3 volts, which appears to be in compliance with the approved WPS.

This QA Inspector observed ZPMC qualified welding personnel identified as 066002 perform welding by Shielded Metal Arc Welding (SMAW), on Deck panel diaphragm to deck panel I-rib stiffener weld of OBG Segment 13CW. Weld joint is identified as DP3146-001-256. ZPMC Quality Control (QC) Inspector identified as Zhang Lin was present to monitor the welding process. The welding variables recorded by ZPMC QC appeared to be in general compliance with WPS-B-P-2213-Tc-U4b-FCM-1. This QA Inspector noted welding variables were 130~145 amperes and 23.7 volts, which appears to be in compliance with the approved WPS.

This QA Inspector observed ZPMC qualified welding personnel identified as 201583 perform welding by Flux Cored Arc Welding (FCAW), on Deck panel diaphragm to deck panel I-rib stiffener weld of OBG Segment 13CW. Weld joint is identified as DP3146-001-249. ZPMC Quality Control (QC) Inspector identified as Zhang Lin was present to monitor the welding process. The welding variables recorded by ZPMC QC appeared to be in general compliance with WPS-B-T-2233-ESAB. This QA Inspector noted welding variables were 230~245 amperes and 25.1 volts, which appears to be in compliance with the approved WPS.

This QA Inspector observed ZPMC qualified welding personnel identified as 067572 perform welding by Shielded Metal Arc Welding (SMAW), on Corner assembly side plate to side plate weld of OBG Segment 13BW. Weld joint is identified as SEG3014M-001. ZPMC Quality Control (QC) Inspector identified as Zhang Lin was present to monitor the welding process. The welding variables recorded by ZPMC QC appeared to be in general compliance with WPS-B-P-2214-B-U2-FCM-1. This QA Inspector noted welding variables were 120~135 amperes and 22.8 volts, which appears to be in compliance with the approved WPS. See attached picture.

WELDING INSPECTION REPORT

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This QA Inspector observed ZPMC qualified welding personnel identified as 068445, 066695 perform welding by Flux Cored Arc Welding (FCAW), on side plate to edge plate weld of Architectural housing assembly of OBG Segment 13AW. Weld joint is identified as AH3001-002. ABF Quality Control (QC) Inspector identified as Shao Jian Yuan was present to monitor the welding process. The welding variables recorded by ABF QC appeared to be in general compliance with WPS-B-T-2231-ESAB. This QA Inspector noted welding variables were 270~290 amperes and 24.9 volts, which appears to be in compliance with the approved WPS.

This QA Inspector observed ZPMC qualified welding personnel identified as 066734 perform welding by Flux Cored Arc Welding (FCAW), on side plate to edge plate weld of Architectural housing assembly of OBG Segment 13BW. Weld joint is identified as AH3002-025. ABF Quality Control (QC) Inspector identified as Shao Jian Yuan was present to monitor the welding process. The welding variables recorded by ABF QC appeared to be in general compliance with WPS-B-T-2231-ESAB. This QA Inspector noted welding variables were 290~305 amperes and 25.3 volts, which appears to be in compliance with the approved WPS.

Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract documents.

Summary of Conversations:

No significant conversations were reported on this date.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Eric Tsang, phone: 15000422372 , who represents the Office of Structural Materials for your project.

Inspected By:	Upadhye,Anand	Quality Assurance Inspector
Reviewed By:	Clifford,William	QA Reviewer